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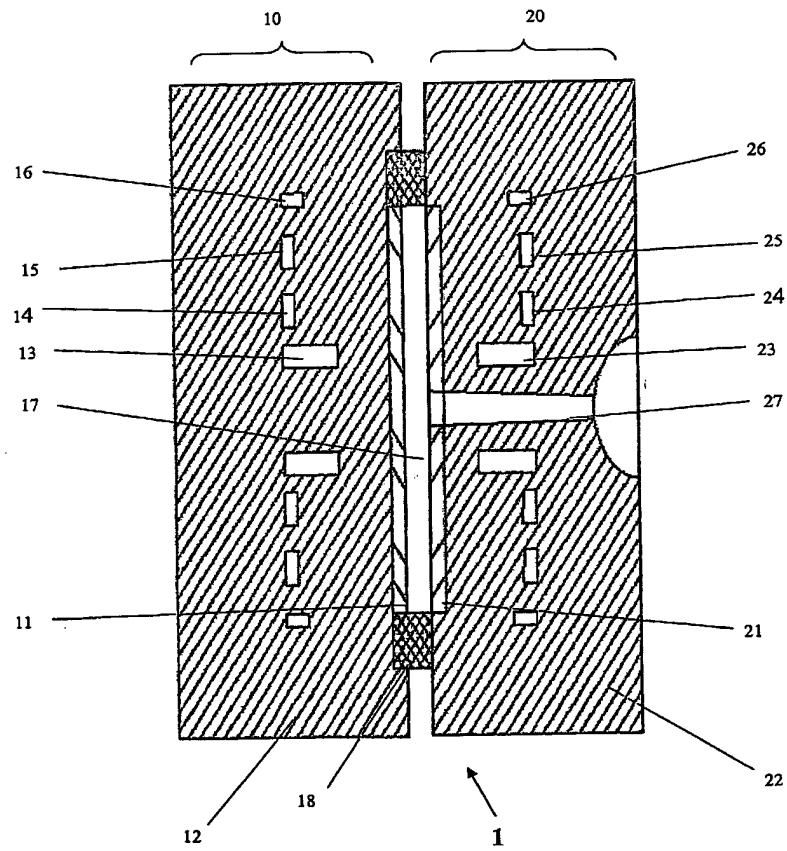
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(54) Title: MOLD AND PROCESS FOR MAKING A VERY THIN WALL ARTICLE



(57) Abstract: An injection mold and process are arranged to produce very thin articles, such as data discs. Molten plastic is injected into mold parts forming a thin cavity (17), in a cyclic molding process wherein the mold parts are subjected to a substantially constant temperature stimulus and rise and fall in temperature during injection and cooling of the molten plastic. Temperature boosting thermal insulation layers (11, 21) are placed along at least certain parts of the molding cavity surface. This elevates the temperature of the melted melt material for a time during injection. According to a calculated relationship, this thermal insulation is sized to permit the thin mold cavity to fill before heat transfer to the mold parts solidifies the molding material and blocks further flow. The temperature boosters can be contoured in thickness.

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